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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,032	06/24/2004	Kazunori Nakamura	KAS-207	2280

7590 04/19/2005

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EXAMINER	
NOVOSAD, CHRISTOPHER J	
ART UNIT	PAPER NUMBER
3671	

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/500,032	NAKAMURA ET AL.	
	Examiner	Art Unit	
	Christopher J. Novosad	3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 June 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *062404*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 5, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese reference '183 in view of Japanese reference '484.

As noted in the Search Report, note the full text and Figs. 1-11 of Japanese reference '183.

Claim 1 distinguishes over Japanese reference '183 in requiring alteration data from an external terminal via communication.

As noted in the Search Report, note Fig. 1 and the disclosure in page 3, the lower right column, line 11 to page 4, the upper left column, line 4 of Japanese reference '484. Note the RS232 communication line (unnumbered; Fig. 1) representing communication of data to an external terminal 61.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized communication from an external terminal as shown in Japanese reference '484 in the system of Japanese reference '183 for greater convenience to the user of the system and to allow for data transfer from a different location.

Claims 3, 4, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese reference '183 in view of Japanese reference '484 as applied to claims 1, 2, 10 and 12 above, and further in view of Japanese reference '881.

Japanese reference '183 shows the system as noted.

The claims distinguish over Japanese reference '183 in requiring (1) the environment modifying means to be a fuel injection modifying means for modifying the fuel injection state of the fuel injection device, which is controlled by the fuel injection control means, in accordance with the detected environment signals by using a predetermined computation element for injection modification; and the communication control means to be means for obtaining, from the external terminal, alteration data for altering the computation element for injection modification based on the obtained alteration data (as required in claim 3); (2) the environment modifying means to include pump torque modifying means for modifying the maximum absorption torque of the hydraulic pump, which is controlled by the pump torque control means, in accordance with the detected environment signals by using a predetermined computation element for torque modification, and fuel injection modifying means to be for modifying the fuel injection state of the fuel injection device, which is controlled by the fuel injection control means, in accordance with the detected environment signals by using a predetermined computation element for injection modification; and said communication control means to be means for obtaining, from the external terminal, alteration data modification for altering the computation element for torque and the computation element for injection modification, and the computation element altering means to be means for altering the computation element for torque modification and the computation element to be for injection modification based on the obtained

alteration data (as required in claim 4); (3) the fuel injection control means to be means for controlling the fuel injection state of the fuel injection device based on the target revolution speed and the actual revolution speed by using a predetermined computation element for injection control; and the communication control means to be means for obtaining, from the external terminal, alteration data for altering the computation element for injection control, and the computation element altering means to be means for altering the computation element for injection control based on the obtained alteration data (as required in claim 6); (4) the pump torque control means to be means for controlling the maximum absorption torque of the hydraulic pump based on the target revolution speed and the actual revolution speed by using a predetermined computation element for torque control; the fuel injection control means to be means for controlling the fuel injection state of the fuel injection device based on the target revolution speed and the actual revolution speed by using a predetermined computation element for injection control; and the communication control means to be means for obtaining, from the external terminal, alteration data for altering the computation element for torque control and the computation element for injection control, and the computation element altering means to be means for altering the computation element for torque control and the computation element for injection control based on the obtained alteration data (as required in claim 7).

As noted in the Search Report, note Figs. 1 and 2 and the full text of Japanese reference '881.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the structure noted of Japanese reference '881 in the system of Japanese reference '813 for improved system performance.

Claims 8, 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese reference '183 in view of Japanese reference '484 as applied to claims 1, 2, 10 and 12 above, and further in view of Japanese reference '704.

Japanese reference '183 shows the system as noted.

The claims distinguish over Japanese reference '183 in requiring (1) the signal processing system to further comprise information collecting means for collecting various items of information including the detected environment signals from the environment detecting means; and the communication control means to output the various items of information obtained by the information collecting means to the external terminal via communication (as required in claim 8); (2) the signal processing system to further comprise operation detecting means for detecting status variables related to the operating state of the prime mover or the hydraulic pump and outputting detected signals; and the information collecting means to be means for collecting various items of information including the detected environment signals from the operation detecting means (as required in claim 9); and (3) the communication control means to perform communication with respect to the external terminal in a wireless manner (as required in claim 11).

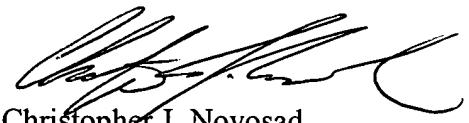
As noted in the Search Report, note Figs. 1-7 and the full text of Japanese reference '704.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the structure noted of Japanese reference '704 in the system of Japanese reference '813 for improved system performance.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher J. Novosad whose telephone number is 571-272-6993. The examiner can normally be reached on Monday-Thursday 5:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Will can be reached at 571-272-6998. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christopher J. Novosad
Primary Examiner
Art Unit 3671

April 14, 2005